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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/555,301	05/26/2000	MARKUS FEUSER	PHD99-097	3809

7590 12/03/2003

Philips Electronics North American Corp.
580 White Plains Rd.
Tarry town, NY 15091

EXAMINER

DADA, BEEMNET W

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/555,301

Applicant(s)

FEUSER, MARKUS

Examiner

Beemnet W Dada

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other: _____

DETAILED ACTION

1. All claims have been examined. Claims 1-4 are pending.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character 38 has been used to designate both input/output and time base on figure 4. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 3 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in alternative only. See MPEP § 608.01(n). The phrase "at least one of the preceding claims", implies any one of the preceding claims or a combination of the preceding claims. Appropriate correction is required. The claim has been treated as an independent claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3 and 4 are rejected under 35 U.S.C 102(e) as being anticipated by Reiner (U.S. Patent No. 5,995,629).

5. As per claim 1, Reiner teaches a method of operating a data processing device, which includes an integrated circuit which carries out, in dependence on clock signal arithmetic operations, data input and data output as well as data transfer from and to registers of the integrated circuit (column 2, lines 14-21, column 1, lines 55-60, and column 3, lines 43-50), characterized in that the integrated circuit is controlled in such manner that the execution of arithmetic operations on one hand and the data input/output as well as the data transfer from one register to another or between registers on the other hand is executed in parallel in time (second time period lying within the first time period) (column 2, lines 21-29, and column 3, lines 43-50).

6. As per claim 3, Reiner teaches a data processing device which includes an integrated circuit which executes arithmetic operations, in dependence on a clock signal, the integrated circuit including a processor with an associated register and data

inputs and data outputs (column 2, lines 14-21, column 1, lines 55-60, and column 3, lines 43-50), characterized in that a second register is connected to the first register and is provided with the data inputs and outputs, a control unit being connected to the integrated circuit and being constructed in such a manner that it controls parallel operation in time of the registers for data input/output and data transfer from register to register or between registers on the one hand and arithmetic operations of the processor on the other hand (column 2, lines 21-29, and column 3, lines 43-50).

7. As per claim 4, claim 4 is rejected applied as above in rejecting claim 3. Furthermore Reiner teaches a first register as an operand register of the processor (encoding unit) and a second register for the input/output (column 3, lines 27-50).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reiner in view of Malek (U.S. Patent No. 5,086,467).

Claim 2 is rejected applied as above in rejecting claim 1. Reiner teaches an encoding device, which includes an integrated circuit, which carries out, in dependence on clock signal arithmetic operations data input and data output as well as data transfer from and to registers of the integrated circuit (column 2, lines 14-21, and column 3, lines 43-50).

Reiner does not explicitly teach execution of dummy calculations. However, Malek teaches a method characterized in that, directly before, during and/or directly after the data transfer from one register to another or between the registers of the integrated circuit, a processor of the integrated circuit executes dummy calculations which acts on random or predetermined data, no data being written into registers of the integrated circuit (column 1, lines 55-68, and column 2, lines, 1-7). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Reiner related to encoding device so as to include a method of generating dummy traffic as per teachings of Malek, because generating dummy traffic further improves the security of the system from traffic analysis.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) U.S. Patent No. 4,932,053 to Fruhauf et al., discloses a safety device against the unauthorized detection of protected data.

- b) U.S. Patent No. 5,249,294 to Griffin, III et al., discloses a determination of time of execution of predetermined data processing routing in relation to occurrence of prior externally observable event.
- c) U.S. Patent No. 5,404,402 to Sprunk, discloses a clock frequency modulation for secure microprocessors.

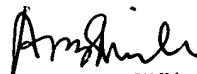
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beemnet W Dada whose telephone number is (703) 305-8895. The examiner can normally be reached on Monday - Friday (8:00 am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on (703) 305-9648. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-5486.

Beemnet Dada

November 21, 2003


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100